

transmitting said class of data to said plurality of intermediate transmission stations.

41. The method of claim 8, where said communications control signal includes one of a schedule and an intermediate generation set.

42. The method of claim 8, wherein said at least one generation control signal enables said plurality of intermediate transmission stations to transmit a plurality of generation instructions to at least one ultimate receiver station, and wherein said at least ultimate receiver station one of receives, enables, and presents television programming in accordance with said plurality of generation instructions, said method further comprising the step of transmitting said television programming from one of (1) said at least one origination station and (2) said transmitter station.

## II. REMARKS

Applicants have not received a filing receipt for this application. Please forward a filing receipt to Applicants.

Applicants are amending claims 2-22 and 24, and adding new claims 25-42. No new matter is added by the amendments or the new claims.

In their 1987 continuation-in-part specification, applicants disclose "an integrated system of programming communication" which encompasses many inventions and deliberately includes many embodiments. Their teaching technique is to introduce the principles of their integrated system in a series of *related* examples. Each example builds upon structure and principles introduced earlier.

Examining basic principles in detail in early examples, enables the specification with concreteness to expand and extend the scope of the teaching in later examples.

Starting with "**One Combined Medium**" on page 19 which focuses on the creation and delivery of a receiver specific graph in a broadcast or cablecast television program, "Wall Street Week," the specification introduces concepts of personalization of mass media and broadcast control of receiver station computing equipment. At page 28 *et seq.* it describes apparatus that include signal processors and signal decoders and introduces the concept of a signal processor *system*. At page 40 *et seq.* it teaches the composition of signal information and the organization of message streams.

Then in a series of four **examples, #1 through #4** which begin on pages 108, 143, 162, and 197 respectively, the specification demonstrates how receiver stations communicate signal processor apparatus and methods ("*SPAM*") processor code and data of the integrated system of programming communication to *some* apparatus they actuate, how decryption occurs, how metering and monitoring take place, and how actuated apparatus perform. Each example builds on concepts introduced earlier in the specification to provide a detailed teaching of its own subject matter, and a particularly important teaching occurs from pages 156 through 162 where the specification teaches the structure and operating capabilities of a *controller of a decoder*.

Building on all that precedes it, **example #5**, which begins on page 248, then relates how the integrated system processes a multichannel communications

system, which conveys different types of signals, in order to monitor programming availability and enable receiver station apparatus to receive desired programming.

From pages 278 through 312, in **example #6** and especially **example #7**, which includes both digital and analog television signals and relates to the "Wall Street Week" program (and which has further disclosure at pages 427 through 447), the specification teaches regulating reception and use of programming of the integrated system of programming communication.

At page 312 *et seq.* it relates further monitoring concepts.

From page 324 through page 390 the specification teaches a series of transmitter station and transmitter network concepts. This portion of the specification also relies on all previous disclosure in that special attention is given to intermediate transmission stations which, *as receiver stations*, respond to programming transmissions of the integrated system as well as storing, organizing, generating, and transmitting programming. At page 340 *et seq.* **example #8** teaches distribution to, storage and organization at, and retransmission from intermediate transmission stations ("*ITS*") of SPAM programming -- most specifically television spot commercials. At page 354 *et seq.* **example #9** teaches automating intermediate transmission station combined medium operations by describing how an intermediate transmission station responds to an intermediate generation set and other elements of the integrated system to generate processor code and data and transmit the code and data with SPAM programming -- spot commercial unit Q of example #8 -- all of which are subsequently shown in the specification to operate at

receiver stations to deliver receiver specific programming at video monitors, speakers, printers, and transmitters (telephones which communicate to remote data collection stations). At page 374 *et seq.* **example #10** extends the transmitter and network automating concepts of examples #8 and #9 by disclosing a *plurality* of intermediate transmission stations generating processor code and data, in the fashion of example #9, and inserting different code and data into a *network originated* transmission of SPAM programming -- again the unit Q television spot commercial.

From page 390 through 516, the specification discloses further ultimate receiver station ("*URS*") automation concepts, including regulating the URS environment (page 396 *et seq.*), controlling multiple receivers and output devices to present coordinated output (page 406 *et seq.*), receiving selected programming of the integrated system (page 419 *et seq.*), certain *integrated system computer system concepts* (page 427 *et seq.*), whose **example #7** (page 427 *et seq.*) description relies on the receiving selected programming concepts of pages 419-427. At page 447 *et seq.* the specification discloses certain data maintenance, timing control, efficiency, and other concepts involved in controlling combined media operations. At page 457 *et seq.* the specification discloses certain timing, imaging, communication, and transmission processing concepts that relate to efficient delivery of integrated system programming. At page 463 *et seq.* the specification relates to user specific audio, print, and other combined media besides receiver specific video. With all this preparation, the specification is finally able to teach, from page 469 through page 516,

the combined media presentation of **examples #9 and #10** at a plurality of ultimate receiver station (which are responding to signals sent by different intermediate transmission stations). At page 516 *et seq.* the specification discloses enhancing and extending functionality of the integrated system by reprogramming receiver apparatus and enabling receiver stations to process transmissions having new forms of composition.

Finally, at page 533 *et seq.* the specification discloses "**Summary Example**" (#11) which teaches a very large scale integrated data processing and communications problem and its solution(s), using *all of* the disclosed integrated system with iterative broadcasting, response, and refinement.

Because of the integrated nature of the disclosure, no part of the specification is intended to be considered *in isolation*. However, in the present application, the examiner's attention is directed, in general, to the specification at pages 324-390, 469-516, and 533 *et seq.* More specifically, please see page 355, line 15, through page 372, line 6; page 543, lines 20-29; page 554 lines 12-21; page 555, line 14, through page 557, line 32. Applicants provide these specific embodiments in support of the pending claims as by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily bound the scope of the claimed subject matter. Applicants will provide additional specification support in their detailed response to the Examiner's specific rejections provided *infra*.

The Office Action dated December 11, 1996 has been carefully reviewed. As to the paragraph numbered 2 in the Office Action, Applicants will address the art rejection of this Office Action. Applicants, however, traverse the assertion that a double patenting situation exists.

The Office Action rejects all claims in the present application under 35 U.S.C. section 112, second paragraph. (Paragraph 14 of the Office Action). The Office Action states that the "[E]xaminer is not certain that the meets and bounds of these claims can be determined because of the language in the disclosure and claims." It further states that "[a]pplicants are being requested to reference the claim limitations in this application to the disclosure so that the meets and bounds of these claims can be properly considered." This rejection is unspecific with regard to the exact language that is objectionable. Applicants have made a good faith effort to amend the claims to clarify exactly what is being claimed and request that the Examiner call their representative if these amendments have not addressed the problems intended by the Examiner.

Claims 2-8 and 10-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lambert (U.S. 4,381,522, hereinafter Lambert). Paragraph 15 of the Office Action. Regarding claims 2-8, 10-11 and 13-24, the Office Action states that Lambert discloses a method of communicating signals (Fig. 1) comprising the steps of: transmitting first signals including generation instruction and comparison signal or first unit of downloadable code from an origination station (citing telephone system station in the Lambert Abstract); inputting to a computer (citing 11) of an intermediate

transmission station some data in respect to a unit of programming (citing column 2, lines 60-62); detecting and passing the first signals to the computer (citing column 2, lines 23-32); generating second signals or second downloadable code (citing schedule information) by the computer (citing column 1, lines 56-61) and transmitting the second signals to subscribers 18; causing the subscribers to receive some of programming of the unit of programming (citing column 3, lines 5-13). pages 19 and 20 of the Office Action. Regarding claim 12, the Office Action states that Lambert further teaches the step of determining connection and capacity and storing the generation instruction and comparison signal (citing column 2, lines 23-68). Apparently, the Office Action infers that Lambert anticipates every step of each of claims 2-8 and 10-24. Applicants respectfully disagree.

Lambert is directed toward a cable television system which includes a microcomputer that responds to signals from viewers desiring to see particular television program material to provide a schedule video signal that is broadcast over a program schedule channel carrying a video signal representative of television programs to be broadcast, the time of broadcast and the channel where broadcast. The computer in Lambert also provides selecting control signals that cause a particular television signal source, such as on a video tape cassette, disc or film, to provide a video signal that is coupled by a video switch controlled by switching control signals from the computer for modulating a television transmitter associated with a channel selected for broadcasting the selected television program material. Lambert also teaches a television signal combiner that

combines the signals from the different television transmitters for broadcast over a cable to the remote receiver locations and that a viewer at a remote receiving location may select a particular television program for viewing by dialing a telephone number to connect the telephone system to the minicomputer and then dial a number corresponding to the desired program on a schedule made available to each person at the remote receiving locations to be changed by controlling the local oscillator frequency of the associated converter. Abstract of Lambert. Toward this end, the teachings of Lambert must be determined in light of the disclosure provided—and not broadened based on hindsight analysis. With this in mind, Applicants assert that Lambert fails to anticipate every step of each of claims 2-8 and 10-24.

Claim 2 of the present application relates to a method of communicating and controlling receiving and presenting programming in a network, the network comprising a programming origination station, an intermediate transmission station, and at least one subscriber station, wherein the intermediate transmission station receives the programming and a plurality of control signals from the programming origination station and transmitting the programming and the plurality of control signals to the at least one subscriber station , and wherein the at least one subscriber station presents the programming in accordance with the plurality of control signals, the method comprising the steps of: inputting to a computer at the intermediate transmission station data in respect to programming; transmitting a first downloadable code in respect to the programming to the



intermediate transmission station; detecting the presence of the first downloadable code at the intermediate transmission station and passing the detected first downloadable code to the computer; generating a second downloadable code by processing the inputted data under control of the first downloadable code; transmitting the second downloadable code to the at least one subscriber station; and causing the at least one subscriber station to receive and present information to perform one of completing and supplementing the programming under control of the generated second downloadable code.

Applicants assert that Lambert fails to anticipate every step in claim 2. For instance, claim 2 requires the step of "transmitting a first downloadable code . . . to said intermediate transmission station," and the step of generating a second downloadable code by processing . . . inputted data under control of said first downloadable code." The Office Action, refers to the Abstract and column 1, lines 56-61, in Lambert in attempting to establish that Lambert discloses these aforementioned steps. Applicants have carefully reviewed the cited portions in addition to the whole reference but could not locate any language suggesting that Lambert anticipates the claimed "first downloadable code" and the claimed "second downloadable code." In the cited portions, Lambert discusses the transmission of a schedule video signal which is "a signal in alphanumeric format that may be displayed on a television set designating the time and channel for broadcasting selected television program material." There is no teaching or suggestion by Lambert that such schedule signal can control the processing of any inputted data to

produce another downloadable code as required by claim 2. Moreover, Lambert never mentions any sort of transmission of computer programs or code. Applicants, therefore, respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 2 and its passing to allowance.

Claim 3 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, and a detector operatively connected to the at least one signal generator, the method comprising the steps of: transmitting a plurality of first signals from the at least one origination station, each of the plurality of first signals including at least one generation instruction and at least one signal for comparison; receiving in each of the plurality of intermediate transmission stations the plurality of first signals; detecting in each of the plurality of intermediate transmission stations the at least one generation instruction and the at least one signal for comparison; passing in each of the plurality of intermediate transmission stations the at least one generation instruction and the at least one signal for comparison to the automatic control unit; generating in each of the plurality of intermediate transmission stations a second signal in accordance with the at least one generation instruction; and transferring in each of the plurality of intermediate transmission stations the

generated second signal to the transmitter based on at least one comparison performed by the automatic control unit, wherein the second signal when generated by a first of the plurality of intermediate transmission stations is different from the second signal when generated by a second of the plurality of intermediate transmission stations.

Applicants assert that Lambert fails to anticipate every step in claim 3. For example, claim 3 requires the step of "transmitting a plurality of first signals, from at least one origination station," and the "receiving in each of said plurality of intermediate transmission stations said plurality of first signals." Lambert does not disclose the claimed "plurality of intermediate transmission stations." Lambert only discloses remote receiving locations and the location where the its system is located (11, 25, 24, 14, and 16 in Figure 1). Thus, assuming that Lambert teaches the origination station and the subscriber locations, there is no evidence that Lambert anticipates the claimed intermediate transmission stations. Moreover, Lambert fails to anticipate the claimed "plurality of first signals including at least one generation instruction and at least one signal for comparison." Even though the Office Action cites the Abstract of Lambert in support of the alleged disclosure of such first signals, Applicants could not locate any signal that is transmitted in Lambert that even vaguely resembles the claimed "at least one signal for comparison." Lambert discloses the transmission of a schedule video signal, a video signal, control signals that cause a particular television signal to provide the video signal, of a number corresponding to a desired program. None of these Lambert disclosed transmitted

signals are even arguably similar to the claimed "at least one signal for comparison" because Lambert does not disclose passing any of these signals to any unit, along with other signals, for the purpose of comparison. In fact, the nomenclature of the Lambert disclosed signal clearly state what they are used for, and a person with an ordinary skill in the art would not understand any of them to anticipate the claimed "at least one signal for comparison." Applicants, therefore, assert that Lambert fails to anticipate each and every step of claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 3 and its passing to allowance.

Claim 4 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, and a detector operatively connected to the at least one signal generator, the method comprising the steps of: (1) receiving a first signal at a transmission station; (2) generating at least one generation instruction and at least one signal for comparison to effect each of the plurality of intermediate transmission stations to generate a second signal in accordance with the at least one generation instruction and transfer the second signal to the transmitter of each of the plurality of intermediate transmission stations based on at least one comparison performed by the automatic

control unit of each of the plurality of intermediate transmission stations; and (3) transmitting the at least one generation instruction.

Applicants contend that Lambert fails to anticipate every step of claim 4. For instance, claim 4 requires the step of “generating at least one generation instruction and at least one signal for comparison to effect each of said plurality of intermediate transmission stations to generate a second signal in accordance with said at least one generation instruction and transfer said second signal to said transmitter of each of said plurality of intermediate transmission stations based on at least one comparison performed by said automatic control unit of each of said plurality of intermediate transmission stations.” Applicants assert that Lambert does not disclose the claim 4 limitation: “a plurality of intermediate transmission stations.” Lambert only discloses remote receiving locations and the location of the components of its system (11, 25, 24, 14, and 16 in Figure 1). In addition, Lambert never discloses any of the limitations of the above stated claimed step. In fact, the Lambert disclosed invention does not even require the sending of any generation instruction, along with a comparison signal, to any station where generation based on the generation instruction and comparison based on the comparison signal are performed. Thus, Applicants assert that Lambert fails to anticipate this claimed and necessary step of claim 4. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 4 and its passing to allowance.

Claim 5 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, and a detector operatively connected to the at least one signal generator, the method comprising the steps of: (1) receiving a first signal to be transmitted; (2) receiving an instruct signal which is effective, in one of a transmitter station and a receiver station, to generate at least one generation instruction and at least one signal for comparison to effect each of the plurality of intermediate transmission stations to generate a second signal in accordance with the at least one generation instruction and transfer the second signal to the transmitter of each of the plurality of intermediate transmission stations based on at least one comparison performed by the automatic control unit of each of the plurality of intermediate transmission stations; (3) receiving a control signal which operates at the one of the transmitter station and the receiver station to communicate the at least one generation instruction and the at least one signal for comparison to one of a transmitter station transmitter and a receiver station transmitter; and (4) transmitting the first signal, the instruct signal and the control signal.

Applicants contend that Lambert fails to anticipate every step of claim 5. For example, claim 5 requires the step of "receiving an instruct signal which is effective,

in one of a transmitter station and a receiver station, to generate at least one generation instruction and at least one signal for comparison to effect each of the plurality of intermediate transmission stations to generate a second signal in accordance with the at least one generation instruction and transfer the second signal to the transmitter of each of the plurality of intermediate transmission stations based on at least one comparison performed by the automatic control unit of each of the plurality of intermediate transmission stations." Applicants have established above that Lambert does not disclose the claim 5 limitation: "a plurality of intermediate transmission stations." In addition, Lambert never discloses any of the limitations of the above stated claimed step. Lambert fails to teach the claimed "at least one generation instruction," let alone the claimed "instruct signal" that is effective to generate said at least one generation instruction. Applicants, therefore, submit that Lambert fails to anticipate every step of claim 5. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 5 and its passing to allowance.

Claim 6 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, and a detector operatively connected to the automatic control unit, the method

comprising the steps of: transmitting instructions from the at least one origination station , the instructions including a at least one generation control signal; transmitting data for processing from the at least one origination station ; receiving the instructions and the data for processing in each of the plurality of intermediate transmission stations, and detecting the at least one generation control signal, wherein the each of the plurality of intermediate transmission stations passes at least one of (1) the at least one generation control signal and (2) the data for processing to the automatic control unit, and wherein each of the plurality of intermediate transmission stations generates a signal based by processing stored data and the data for processing in accordance with the at least one generation control signal such that the signal when generated by a first of the plurality of intermediate transmission stations is different from the signal when generated by a second of the plurality of intermediate transmission stations.

Applicants contend that Lambert fails to anticipate every step of claim 6. For instance, claim 6 requires the step of “receiving . . . in each of said plurality of intermediate transmission stations.” Applicants assert that Lambert does not disclose the claim 6 limitation: “a plurality of intermediate transmission stations.” Lambert only discloses remote receiving locations and the location of the components of its system (11, 25, 24, 14, and 16 in Figure 1). Applicants, therefore, submit that Lambert fails to anticipate every step of claim 6. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 6 and its passing to allowance.



Claim 7 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, a detector operatively connected to the automatic control unit, wherein the automatic control unit is being programmed to perform in a station-specific fashion, the method comprising the steps of: (1) receiving a signal at a transmission station; (2) generating at least one generation control signal to effect each of the plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with the at least one generation control signal; and (3) transmitting the at least one generation control signal.

Applicants contend that Lambert fails to anticipate every step of claim 7. For example, claim 7 requires the step of "generating at least one generation control signal to effect each of the plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with the at least one generation control signal." Applicants have established above that Lambert does not disclose the claim 7 limitation: "a plurality of intermediate transmission stations." Moreover, Applicants assert that Lambert fails to anticipate the claim 7 step stated above. The control signals taught by Lambert cause "a particular television signal source, such as video tape cassette, disc or film, to provide a video signal that is

coupled by a video switch controlled by switching control signals from the computer for modulating a television transmitter associated with a channel selected for broadcasting the selected television program material.” Abstract of Lambert. The cited portion of Lambert, in addition to other portions of Lambert further discussing this cited portion, clarifies that the none of the Lambert disclosed control signals perform the claimed function of the claimed “at least one generation control signal” in claim 7, namely to effect each of the plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with the at least one generation control signal. Applicants, therefore, submit that Lambert fails to anticipate every step of claim 7. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 7 and its passing to allowance.

Claim 8 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, a detector operatively connected to the automatic control unit, wherein the automatic control unit is being programmed to perform in a station-specific fashion, the method comprising the steps of: (1) receiving a signal to be transmitted; (2) receiving an instruct signal which is effective, in one of a transmitter station and a receiver

station, to generate at least one generation control signal which is effective to enable at least one of the plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with the at least one generation control signal; (3) receiving a communications control signal which operates at the one of the transmitter station and the receiver station to communicate the at least one generation control signal to one of a transmitter station transmitter and a receiver station transmitter; and (4) transmitting the signal, the instruct signal and the communications control signal.

Applicants contend that Lambert fails to anticipate every step of claim 8. For instance, claim 6 requires the step of "receiving an instruct signal which is effective, in one of a transmitter station and a receiver station, to generate at least one generation control signal which is effective to enable at least one of the plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with the at least one generation control signal." Applicants have established above that Lambert does not disclose the claim 8 limitation: "a plurality of intermediate transmission stations." Applicants have also established in their argument regarding claim 7, that Lambert fails to anticipate the claimed "at least one generation control signal." Applicants, therefore, submit that Lambert fails to anticipate every step of claim 8. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 8 and its passing to allowance.

Claims 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24 of the present application directly depend from claim 3. Claim 13 directly depend from claim 12, which in turn directly depends from claim 3. Thus claims 10-24 are all limited by the claim 3 limitations. Applicants hereby incorporate the arguments advanced in claim 3 and assert that Lambert fails to anticipate every limitation of claim 3. Applicants, therefore, submit that claims 10-24 are at least patentable by virtue of their dependency from claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejections of claims 10-24 and their passing to allowance.

Claims 2-8 and 10-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Lert (U.S. 4,230,990, hereinafter Lert). Paragraph 16 of the Office Action. Regarding claim 2, the Office Action states that Lert discloses a method of communicating signals of a communication network comprising at least one origination station (citing 20); a plurality of intermediate stations (citing Figure 3), each comprising an automatic control unit, a detector and a generator (citing Figures 1-5). The Office Action then states that the Lert method comprises the steps of: inputting to a computer (citing 66) of the intermediate station (citing Figure 2) some data in respect to programming (citing column 12, lines 21-36); transmitting a first downloadable code in respect to the programming to the intermediate transmission station (citing column 11, lines 66 to column 12, line 2); detecting the presence of the first downloadable code and passing the downloadable code to the computer (citing column 12, line 3); generating a second downloadable code by processing the input

data under control of the first unit; transmitting the second unit to at least one subscriber station (citing computer 28); and causing the subscriber station to receive some programming in respect to programming under control of the second unit. pages 20 and 21 of the Office Action. Apparently, the Office Action infers that Lert anticipates every step of claim 2. Applicants respectfully disagree.

Lert is directed toward an automated method and system for identifying broadcast programs wherein a pattern recognition process is combined with a signalling event which acts as a trigger signal. In Lert, at least one such trigger, or "cue" signal, occurs with each broadcast of every program which is to be identified; and these signals are used to activate the pattern recognition process which results in program identification. These cue signals can either be artificially inserted into the program signal or they can be events which occur naturally as part of normal broadcast procedures. A segment of each program at a predetermined location with respect to one of these cue signals is sampled and processed according to a feature extraction algorithm to form the program's reference signature, which is stored in computer memory. In the field, the monitoring equipment detects cue signals broadcast by a monitored station and, upon detection, samples the broadcast program signal at the same predetermined location with respect to the detected cue and uses the same feature extraction process to create a broadcast signature of unknown program identity. By comparing broadcast signatures to reference signatures, a computer identifies the broadcasts of programs whose reference signatures have been in memory. Abstract of Lert. Toward this end, the teachings of

Lert must be determined in light of the disclosure provided—and not broadened based on hindsight analysis. With this in mind, Applicants assert that Lert fails to anticipate every step of each of claim 2.

Applicants assert that Lert fails to anticipate every step of claim 2. For instance, claim 2 of the present invention requires the step of “transmitting a first downloadable code in respect to the programming to the intermediate transmission station.” The Office Action states that Lert discloses this required step in column 11, lines 66 to column 12 line 2. Page 21 of the Office Action. The cited portion states that “the broadcast signal 24 from a monitored broadcasting station 20 is acquired by receiving antenna 50 and fed to a receiver 52, which includes a tuner and amplifier.” Applicants assert that such disclosure fails to anticipate the required step in claim 2. In the above cited portion Lert discusses receiving the broadcast signal not any type of downloadable code. Applicants have carefully reviewed Lert but did not find any reference to any type of transmitted code. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 2 and its passing to allowance.

Regarding claims 3-8, the Office Action states that Lert discloses a method for communicating signals comprising the steps of: transmitting first signals including instruction and comparison signal (cue and time signals) from the origination station (citing 20); receiving first signals including the instruction and comparison signal by intermediate transmission stations (citing Figure 3); and generating second signals in accordance with the instruction and transmitting the second signals to its

transmitters (citing 68). Pages 21 and 22 of the Office Action. Nevertheless, Applicants disagree with the Office Action characterization that Lert anticipates every step of claims 3-8.

For example, each of claims 3, 4, and 5 require the claimed "at least one generation instruction" and the claimed "at least one signal for comparison." The Office Action argues that Lert's cue and time signals anticipate these claimed limitations in claims 3, 4, and 5. Applicants, however assert that the Lert taught cue and time signals are very different from these claimed limitations. As the Lert Abstract states, the cue signals are trigger signals that occur with each broadcast of every program. They serve the purpose of triggering a pattern recognition process to identify the program they are embedded into. The time signal, discussed in column 12, line 21-36 of Lert, is used to insure accuracy of the throughput rate. In sharp contrast to these Lert taught signals, the claimed "at least one generation instruction" effects each intermediate transmission station to generate a generated signal and the claimed "at least one for comparison operates at the automatic control unit of each intermediate transmission station to compare the generated signal. Applicants have carefully reviewed the Lert reference and found no instance of similarity to these claimed limitations. Accordingly, Applicants submit that Lert fails to anticipate each and every step of claims 3, 4, and 5 and, thus, respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of these claims and their passing to allowance.

Regarding claims 6, 7, and 8, the Office Action does not state where in Lert is there any disclosure of the limitation “at least one generation control signal.” Applicants have carefully reviewed Lert but could not find any teaching that discloses the claimed “at least one generation control signal” that are effective to generate a generated signal by processing data stored in the intermediate transmission station. Applicants, therefore, submit that Lert fails to anticipate the claimed “at least one generation control signal” which limits claims 6, 7, and 8, and respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claims 6, 7, and 8 and their passing to allowance.

Claims 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24 of the present application directly depend from claim 3. Claim 13 directly depend from claim 12, which in turn directly depends from claim 3. Thus claims 10-24 are all limited by the claim 3 limitations. Applicants hereby incorporate the arguments advanced in claim 3 and assert that Lert fails to anticipate every limitation of claim 3. Applicants, therefore, submit that claims 10-24 are at least patentable by virtue of their dependency from claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejections of claims 10-24 and their passing to allowance.

Claims 3 and 9 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kolettis (U.S. 3,990,050, hereinafter Kolettis). Paragraph 17 of the Office Action. Regarding claim 3, the Office Action state that Kolettis discloses a method of communicating signals comprising the steps of: transmitting first signals including



generation instruction (citing command or request) and comparison signal from an origination station (citing 23 and column 5, lines 51-68); the intermediate station (citing 22, 15, and 16) receiving the generation instruction and comparison signal (citing ID) signal from an origination station (citing 23); generating second signals based on the instruction and comparison signal; transmitting second signals via output decoder. Pages 23 and 24 of the Office Action. Nonetheless, Applicants respectfully disagree with the Office Action characterization that Kolettis anticipates each step of claim 3.

Kolettis is directed toward a multiline inquiry-response system which is realized by employing a minicomputer system. In this system, predetermined signals are digitally encoded and stored in a disk memory. In response to requests from one or more lines, the computer central processor determines which digital words are required from the disk. The digital words are read from the disk memory to a plurality of registers in one or more of a plurality of dedicated buffer storage stages in a core memory. Each buffer stage is assigned to a designated output line. A direct memory access output multiplexer (DMAMUX) is employed to read the digital words from the registers in the loaded dedicated buffer storage stages to corresponding output lines without substantial processor control. To this end, the multiplexer monitors address signals transmitted in the computer system to detect which ones of the buffer storage stages include registers that have been loaded with digital words from the disk memory. Then control signals are generated by the multiplexer which are employed to effect reading the digital words from the

registers in the loaded buffer storage stages in a prescribed sequence to corresponding requesting lines without programmed intervention of the processor. Abstract of Kolettis. Toward this end, the teachings of Kolettis must be determined in light of the disclosure provided—and not broadened based on hindsight analysis. With this in mind, Applicants assert that Kolettis fails to anticipate every step of each of claim 3.

Claim 3 of the present application relates to a method of communicating signals in a communications network, the communications network including at least one origination station and a plurality of intermediate transmission stations, each of the plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to the receiver, a transmitter, an automatic control unit operatively connected to the at least one signal generator, and a detector operatively connected to the at least one signal generator, the method comprising the steps of: transmitting a plurality of first signals from the at least one origination station, each of the plurality of first signals including at least one generation instruction and at least one signal for comparison; receiving in each of the plurality of intermediate transmission stations the plurality of first signals; detecting in each of the plurality of intermediate transmission stations the at least one generation instruction and the at least one signal for comparison; passing in each of the plurality of intermediate transmission stations the at least one generation instruction and the at least one signal for comparison to the automatic control unit; generating in each of the plurality of intermediate transmission

stations a second signal in accordance with the at least one generation instruction; and transferring in each of the plurality of intermediate transmission stations the generated second signal to the transmitter based on at least one comparison performed by the automatic control unit, wherein the second signal when generated by a first of the plurality of intermediate transmission stations is different from the second signal when generated by a second of the plurality of intermediate transmission stations.

Claim 3 requires the limitation of "transmitting a plurality of first signals from said at least one origination station" where "each of said plurality of first signals including at least one generation instruction and at least one signal for comparison." The claimed "at least one signal for comparison" is effective at the automatic control unit of each of the plurality of intermediate control stations so that this automatic control unit can perform at least one comparison, based on said at least one comparison signal, before transferring the generated second signal to the transmitter. Applicants assert that Kolettis fails to anticipate the claimed "at least one signal for comparison" which is transmitted from the at least one origination station and which is used in the automatic control unit as basis for said at least one comparison of the second generated signal. Moreover, Applicants assert that Kolettis fails to anticipate the claimed "plurality of intermediate transmission stations." the Office Action argues that Kolettis discloses the plurality of intermediate transmission stations in 22 (the switching equipment), 15 (the incoming signal interface), and in 16 (the output multiplexer (DMAMUX)). Applicants assert that

these Kolettis taught elements are not the same as the claimed “plurality of intermediate transmission stations” because they do not each contain an automatic control unit that performs at least one comparison based on said at least one signal for comparison. Assuming, *arguendo*, that all of these element comprise one intermediate transmission station, Applicants submit that the Kolettis teaching does not disclose that a multiple of these elements can work in a coherent fashion from at least one origination station as claim 3 suggests. In fact, that is not taught or anticipated by Kolettis. Kolettis “relates to an automatic response system and, more particularly, to an inquiry-response system in which responses are supplied in real time to one or more inquiring stations.” Thus Kolettis teaches that one or more stations (i.e., 23-0, 23-1 . . . 23-N which are characterized by the Office Action as the at least one origination station) can access this one automatic response but does not teach that a single station (e.g., 23-0) can operate with a multiple automatic response units. Based on the above arguments, Applicants respectfully assert that Kolettis fails to anticipate each of the steps and limitations of claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 3 and its passing to allowance.

Regarding claim 9, the Office Action states that Kolettis further teaches that the instruction including items or formula to generate software and the intermediate station generates machine language from the generated software (citing column 21, line 35-68). page 24 of the Office Action. Applicants, however, disagree that Kolettis anticipates each of the steps of claim 9.

Claim 9 depends from claim 3. Applicants, therefore, incorporate their argument that Kolettis fails to anticipate each and every limitation of claim 3. Thus, Applicants submit that claim 9 is at least patentable by virtue of its dependence from claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 9 and its passing to allowance.

Claims 3-9 are rejected under 35 U.S.C. § 102(e) as being anticipated by Fletcher (U.S. 4,054,911, hereinafter Fletcher). Paragraph 18 of the Office Action. Regarding claims 3-8, the Office Action states that Fletcher discloses a method of communicating signals over a communication network comprising an origination station (citing TV distribution system), a plurality of intermediate transmission stations (citing Figure 7), each of the intermediate stations comprising an automatic control unit, a generator and a detector, and this method comprises: transmitting first signals including generation instruction and comparison signal (column 2, lines 40-68) from the origination station; the intermediate station receiving the generation instruction and comparison signal and generating second signals, transmitting the second signal to its transmitter (citing Figure 7). Pages 24 and 35 of the Office Action. However, Applicants respectfully disagree with the Office Action's characterization that Fletcher anticipates each step of claims 3-8.

Fletcher is directed toward an information retrieval system capable of capturing packets or rows of video displayable data and/or control program instructions continuously transmitted in a common predetermined format, such as pseudo video scan lines, over a common predetermined video signal transmission

media, such as television signal distribution means, captures these packets from a continuously transmitting remote data base comprising a plurality of different control programs and different data rows in order to provide a selected purpose variable function terminal with information display as well as particular type of processing thereof can individually be substantially simultaneously varied for each terminal of a plurality of terminals in the system. The control program instructions comprise a first plurality of continuously remotely transmitted different selectable sets of microprocessor processing control instructions for the terminal for controlling the operation thereof to process the transmitted data in accordance therewith, and a common second set of continuously remotely transmitted instructions for controlling the loading of any selected one of the first plurality of selectable sets of microprocessor processing control instructions into a local storage means which is operatively connected to the microprocessor which is operable in accordance with said locally stored selected set of processor control instructions. The local storage means further comprises a common third set of stored retrieval control instructions for controlling the loading of the common second set of control instructions into the local storage means. By selection means, such as a keyboard, the user is capable of individually determining what video displayable information is to be received and how the particular user terminal which receives this information is to process it, such as selecting a video displayable row grabbing function for the terminal which would continuously update the video display on a real time row-by-row basis. Abstract of Fletcher. Toward this end, the teachings of

Fletcher must be determined in light of the disclosure provided—and not broadened based on hindsight analysis. With this in mind, Applicants assert that Fletcher fails to anticipate every step of each of claims 3-8.

For example, each of claims 3, 4, and 5 require the claimed “at least one generation instruction” and the claimed “at least one signal for comparison.” The claimed “at least one generation instruction” effects each intermediate transmission station to generate a generated signal and the claimed “at least one for comparison operates at the automatic control unit of each intermediate transmission station to compare the generated signal. The Office Action cites Figure 7 of Fletcher as the intermediate transmission station. Figure 7 shows a comparator (302). In Fletcher, beginning on line 23 of column 43, the functionality of this comparator is stated:

the comparator 302 is preferably conventionally loaded with a comparison word which corresponds to special character 32, which, in the example given, implies that the captured program row is associated with the software bootstrap program. Comparator 32 then functions in conventional fashion to compare all transmitted and received packets or rows against this comparison word to determine if the packet being received is a software bootstrap.

*emphasis added.* Thus, in Fletcher, the predetermined comparison word is pre-loaded in the comparator and not transmitted and received in the intermediate station. This is very different from the claimed comparison functionality in claims 3, 4, and 5 where the at least one signal for comparison is transmitted and received in each of the plurality of intermediate transmission stations. Based on the foregoing arguments, Applicants submit that Fletcher fails to anticipate each and

every limitation of claims 3, 4, and 5. Accordingly, Applicants submit that Lert fails to anticipate each and every step of claims 3, 4, and 5 and, thus, respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of these claims and their passing to allowance.

Regarding claims 6, 7, and 8, the Office Action does not reference where in Fletcher there is any teaching or anticipation of the limitation “at least one generation control signal.” Applicants have carefully reviewed Fletcher but could not find any teaching that discloses the claimed “at least one generation control signal” that are effective to generate a generated signal by processing data stored in the intermediate transmission station. Applicants, therefore, submit that Fletcher fails to anticipate the claimed “at least one generation control signal” which limits claims 6, 7, and 8, and respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claims 6, 7, and 8 and their passing to allowance.

Claim 9 depends from claim 3. Applicants, therefore, incorporate their argument that Fletcher fails to anticipate each and every limitation of claim 3. Thus, Applicants submit that claim 9 is at least patentable by virtue of its dependence from claim 3. Accordingly, Applicants respectfully request the reconsideration of the 35 U.S.C. § 102(b) rejection of claim 9 and its passing to allowance.

As to the paragraph numbered 3 in the Office Action, Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, *arguendo*, that substantially duplicate claims do exist, Applicants intend



to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

As to the paragraph numbered 4 in the Office Action, Applicants acknowledge and appreciate the Examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, Applicants intend to ensure that the disclosure supports each possible embodiment claimed using alternative claim language.

The Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." (Paragraph 10 of the Office Action). Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in the Examiner's first Office Action. 37 CFR § 1.104(a) states that "[o]n taking up an application for examination . . . the Examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated." The MPEP states "[t]he [E]xaminer's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the

[E]xaminer may be limited to such matters before action is made.” MPEP § 707.07, citing 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The [E]xaminer ordinarily should reject each claim on all valid grounds available . . . .” “Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP § 707.07(g). Applicants submit that the Examiner has a duty to give each application a complete examination, to make rejections with specificity, and to not defer rejections.

For these reasons, Applicants likewise traverse the rejection, made in paragraph 11 of the Office Action, which is based on the “judicially created doctrine of double patenting” over the claims of copending U.S. application 08/113,329 and the copending applications listed on pages 13, 14 and 15 of the Office Action. Applicants submit that this rejection, even if appropriately made with specificity, should nonetheless be a provisional double patenting rejection. Applicants, however, respectfully request that this rejection be withdrawn.

Applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. (Paragraphs numbered 19 in the Office Action,). In the interest of maintaining a clear record, however, Applicants respectfully traverse the Office Action’s interview summary statement that an offer was made to terminally disclaim the present application with respect to the ‘81 or ‘87 patents. Rather, Applicants respectfully submit that their offer was to disclaim a block of co-pending

applications against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

As to the Office Action's rejection of Applicants' claims under a non-statutory non-obvious type of double patenting (for example, as in paragraphs collectively numbered 5, 7, 8, 9, 12, and 13), Applicants strongly traverse the Examiner's double patenting rejection on three separate grounds. First, the applied section, MPEP § 804 (II)(B)(2) defining non-statutory non-obvious double patenting, is predicated on an improper reading of case law, and, thus, the resultant rejection constitutes an ultra vires action by the PTO. Second, the PTO's present rejection based on MPEP section 804 (II)(B)(2) is no more than an application of the now discredited late claiming doctrine. Third, even assuming *arguendo* that the non-statutory non-obvious double patenting rejection set forth in MPEP § 804 (II)(B)(2) is a proper reading of case law, and not in violation of the Administrative Procedure Act, this class of rejection does not apply to the factual situation of the present application. Applicants have addressed each of these contentions in their reply brief.

In addition, Applicants contend that the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." (Office Action, at

page 9). The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller Court's determination that the double patenting rejection should be affirmed. (Office Action, at pages 5 and 6). The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. Id. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . . ." Id. Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable.

First representative claim, claim 7 of U.S. patent 4,694,490, covering present application claim 7

Claim 7 of U.S. Patent No. 4,694,490 covers a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display specific to a specific user.

Present application claim 7 relates to a method of communicating signals in a communications network. This method comprising the steps of: (1) receiving a signal at a transmission station; (2) generating at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and (3) transmitting said at least one generation control signal.

Patent claim 7 relates to presentation of overlay signals combined with a television program. Present application claim 7 pertains to the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Present application claim 7 does not directly address or infer the concept of overlay signals. Patent claim 7 does not directly address or infer the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Patent claim 7 does not cover present application claim 7. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. Patent 4,694,490, Claim 7	Present application, claim 7 (as amended)
<p>In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay</p>	<p>A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission stations, each of said plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to said receiver, a transmitter, an automatic control unit operatively connected to said at least one signal generator, a</p>

modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct-to-overlay signal are transmitted to said receiver stations, the steps of:

receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations

detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

detector operatively connected to said automatic control unit, wherein said automatic control unit is being programmed to perform in a station-specific fashion, said method comprising the steps of:

- (1) receiving a signal at a transmission station;
- (2) generating at least one generation control signal to effect each of said plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and
- (3) transmitting said at least one generation control signal.

Second representative claim, U.S. patent 4,704,725, claim 3 covering present application claim 7

Claim 3 of U.S. Patent No. 4,704,725 covers a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can

modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal.

Present application claim 7 relates to a method of communicating signals in a communications network. This method comprising the steps of: (1) receiving a signal at a transmission station; (2) generating at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and (3) transmitting said at least one generation control signal.

Patent claim 3 relates to the communication of user specific signals. Present application claim 7 pertains to present application claim 7 pertains to the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Patent claim 3 does not cover present application claim 7. Present application claim 7 does not directly address or infer the communication of user specific signals. Patent claim 3 does not directly address or infer the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

<b>U.S. patent 4,704,725, claim 3</b>	<b>Present application, claim 7 (as amended)</b>
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output	A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission

devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;

detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and

causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

stations, each of said plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to said receiver, a transmitter, an automatic control unit operatively connected to said at least one signal generator, a detector operatively connected to said automatic control unit, wherein said automatic control unit is being programmed to perform in a station-specific fashion, said method comprising the steps of:

(1) receiving a signal at a transmission station;

(2) generating at least one generation control signal to effect each of said plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and

(3) transmitting said at least one generation control signal.

Third representative claims, U.S. patent 4,965,825, claim 24 covering present application, claim 7

Claim 24 of U.S. Patent No. 4,965,825 covers a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the



user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 7 relates to a method of communicating signals in a communications network. This method comprising the steps of: (1) receiving a signal at a transmission station; (2) generating at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and (3) transmitting said at least one generation control signal.

Patent claim 24 relates to transmission of user specific information at a time when said information does not exist. Also, in patent claim 24, each receiver station is programmed with a special user application. These limitations and features are not directly addressed or inferred by present application claim 7. Present application claim 7 pertains to present application claim 7 pertains to the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Present application claim 7 does not address or imply the concept of a receiver station being programmed with a special user application. Patent claim 24 does not directly address or infer the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Patent claim 24 does not cover present application claim 7. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

**U.S. patent 4,965,825, claim 24**

In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of:

transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

**Present application, claim 7 (as amended)**

A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission stations, each of said plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to said receiver, a transmitter, an automatic control unit operatively connected to said at least one signal generator, a detector operatively connected to said automatic control unit, wherein said automatic control unit is being programmed to perform in a station-specific fashion, said method comprising the steps of:

- (1) receiving a signal at a transmission station;
- (2) generating at least one generation control signal to effect each of said plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and
- (3) transmitting said at least one generation control signal.

Fourth representative claims, U.S. patent 5,109,414, claim 15 covering present application, claim 7

Claim 15 of U.S. Patent No. 5,109,414 covers a signal processing system which receives data from a data source and outputs the data to a matrix switch and a

detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 7 relates to a method of communicating signals in a communications network. This method comprising the steps of: (1) receiving a signal at a transmission station; (2) generating at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and (3) transmitting said at least one generation control signal.

Patent claim 15 relates to controlling a matrix switch to communicating data from a single data source to a data transmission selectively by processing control signals which are detected within the data and stored for further processing. Present application claim 7 pertains to present application claim 7 pertains to the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Present application claim 7 does not directly address or infer the concepts of a matrix switch, a detector, or storage of control signals. Patent claim 15 does not directly address or infer the generation of at least one generation control signal to effect each of a plurality of intermediate transmission stations to generate a generation instruction by processing stored data. Patent claim 15 does not cover present application claim 7. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 5,109,414, claim 15	Present application, claim 7 (as amended)
<p>In a signal processing system,</p> <p>    a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,</p> <p>    a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,</p> <p>    a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,</p> <p>    a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and</p> <p>    a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.</p>	<p>A method of communicating signals in a communications network, said communications network including at least one origination station and a plurality of intermediate transmission stations, each of said plurality of intermediate transmission stations having a receiver, at least one signal generator operatively connected to said receiver, a transmitter, an automatic control unit operatively connected to said at least one signal generator, a detector operatively connected to said automatic control unit, wherein said automatic control unit is being programmed to perform in a station-specific fashion, said method comprising the steps of:</p> <ol style="list-style-type: none"> <li>(1) receiving a signal at a transmission station;</li> <li>(2) generating at least one generation control signal to effect each of said plurality of intermediate transmission stations to generate a generation instruction by processing stored data in accordance with said at least one generation control signal; and</li> <li>(3) transmitting said at least one generation control signal.</li> </ol>


By the foregoing amendment, Applicants seek to add new dependent claims 25-42. Because each of these claims depends from claims 2, 4, 5, 6, 7, or 8, Applicants assert that each of these claims is patentable for at least the reasons advanced above relative to claims 2-8 Applicants therefore respectfully request that the Examiner pass claims 2-42 to allowance.

### III. CONCLUSION

All of the Examiner's outstanding grounds of objection and rejection have been properly accommodated, traversed or rendered moot. Applicants therefore respectfully request that the Examiner withdraw all outstanding objections and rejections, and pass claims 2-42 to allowance. The Examiner is invited to call the undersigned at the telephone number indicated below if such a call would facilitate the prosecution of this application.

Date: June 11, 1997  
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Respectfully submitted,

  
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